



FIG. 2

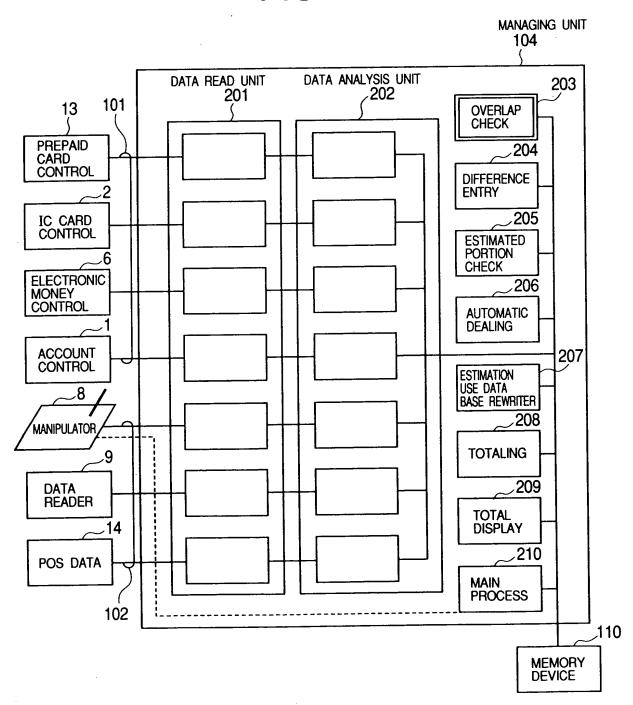
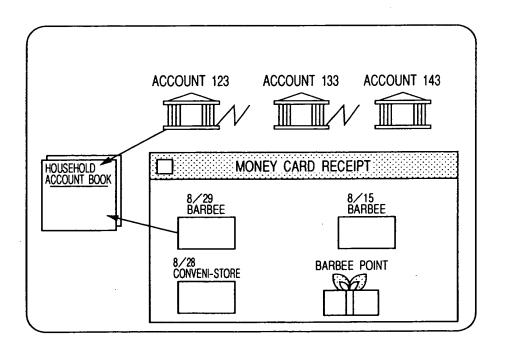




FIG. 3





8/29 BARBEE **IMAGE** 1987Y 8M 29D 13;20 TEXT 1 [BILL] KEYMA CURRY ¥680-SEASON'S SALAD ¥480-¥1,160-SUBTOTAL CONSUMP. TAX ¥34-¥1,194-TOTAL PAYMENT VIA IC CARD TEXT 2 [NOTICE] During Sept. CURRY FAIR ON-GOING! ( MENU GUIDE HTML FORMAT

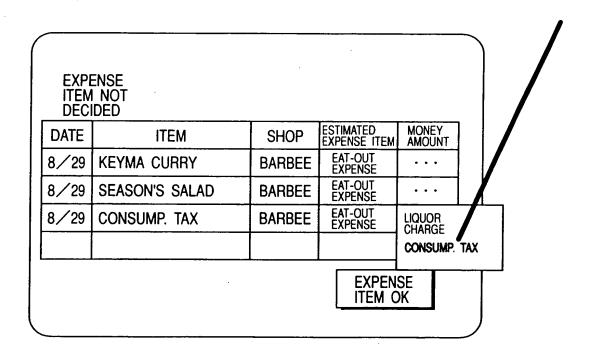
BARBEE POINT

POINT 3

THANK YOU FOR USING AS CURRENT POINT IS ABOVE, WHICH IS VALID UNTIL 2001.

WHEN YOU COLLECT 10 POINTS,...



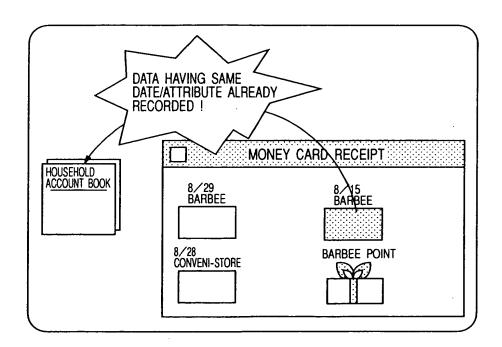




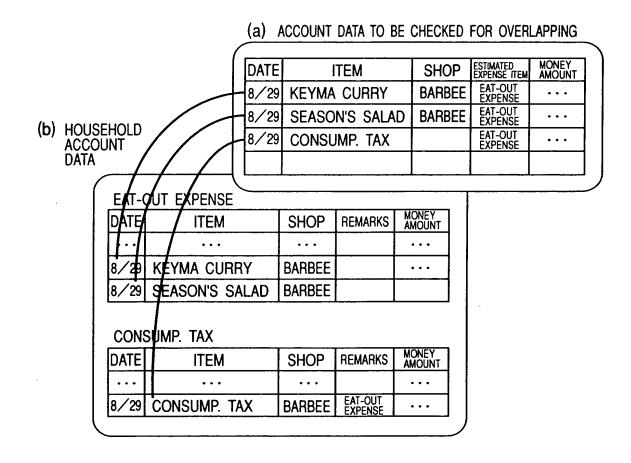
| <del></del>         |               | <del></del>    |    | <del></del>             |             |         |                 |
|---------------------|---------------|----------------|----|-------------------------|-------------|---------|-----------------|
| ACCOUN <sup>1</sup> | T 123         | DEALING        | RE | CORD                    |             |         |                 |
| YM                  | D             | NOTE           |    | INCOME /<br>EXPENDITURE |             | M<br>Al | ONEY<br>MOUNT   |
| H8. 11.             | 13            | SALARY         |    | INCO                    |             |         | • • •           |
| H8. 11.             | 13            | HOME LO        | ٩N | EXPENSE                 |             |         | • • •           |
| H8. 11.             | 14            | WATER FE       | Ε  | EXPENSE                 |             |         | • • •           |
|                     |               |                |    |                         |             |         |                 |
|                     |               |                |    | 7                       |             |         |                 |
|                     |               | FIG.           |    | 7                       |             |         |                 |
| INCOME              | <u>.</u>      |                |    |                         |             |         |                 |
| DATE                | ITEM          |                |    | DEALING<br>DESTINATED   |             | ARKS    | MONEY           |
|                     |               | • • •          |    | •••                     |             | -       | •••             |
| 11/13               |               | SALARY         |    | ACCC<br>123             |             | UNT     |                 |
| EXPEND              | ITUR          | F              |    |                         |             |         |                 |
| HOUSING             |               |                |    |                         |             |         |                 |
| DATE                |               | ITEM           | 1  | SHOP                    | REMA        | RKS     | MONEY<br>AMOUNT |
| •••                 |               | •••            |    | •••                     |             |         | •••             |
| 11/13               | НО            | ME LOAN        |    |                         | ACCO<br>123 | UNT     |                 |
| WATER, E<br>HEATING | LECTF<br>EXPE | RICITY,<br>NSE |    |                         |             |         |                 |
| DATE                |               | ITEM           |    | SHOP                    |             |         | MONEY<br>AMOUNT |
| •••                 |               | •••            |    | • • •                   |             |         | • • •           |
| 11/14               | WA            | TER FEE        |    |                         | ACCO<br>123 | UNT     | • • •           |
|                     |               |                |    |                         |             | Ok      |                 |



FIG. 8



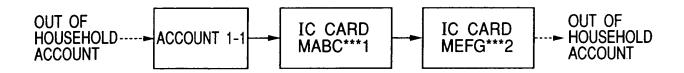






|   | Y M D<br>H8. 11. 13 |                       |           |                            | NOTE                  | IOTE           |                 | JRE               | MONEY<br>AMOUNT | REMARKS        |
|---|---------------------|-----------------------|-----------|----------------------------|-----------------------|----------------|-----------------|-------------------|-----------------|----------------|
|   |                     |                       | SALARY    |                            |                       | INCOME         |                 | • • •             |                 |                |
|   |                     |                       | •••       |                            | •••                   |                | •••             |                   | • • •           |                |
| ( | (b)                 | H8.                   | 11. 20    | IC CA                      | ARD CHARGE            |                | EXPENDITURE     |                   | 80,000          | /_             |
| _ | IC CA               | ARD/M                 | ABC***1 [ | DEALING                    | RECORD                |                |                 | $\mathcal{F}$     |                 | [/]            |
|   | ΥN                  | Y M D NOT             |           | E INCOME / MEXPENDITURE AN |                       | IONEY<br>MOUNT |                 | IC                | CARD NO.        |                |
|   | •                   |                       |           | • • • •                    |                       | ļ              | ···   M/        |                   | MAE             | 3C***1         |
|   |                     |                       | • • •     |                            |                       |                |                 |                   |                 |                |
| - |                     | 11. 20                |           | CHARGE                     |                       | 8              | 80,000          |                   | FRC<br>ACC      | OM<br>COUNT 12 |
|   | H8. 11. 20          |                       | PAYMEN    | T                          | EXPENDITURE           |                | 5,000           |                   |                 |                |
|   |                     |                       |           |                            |                       | 1              |                 | $\prod_{i=1}^{n}$ | IC (            | CARD NO.       |
|   | IC                  | CARD/                 |           |                            | ING RECOR             | D              | MONEY           | 7                 |                 |                |
|   | <u> </u>            | YMD                   | N N       | OTE                        | INCOME /<br>EXPENDITU | RE             | MONEY<br>AMOUNT |                   |                 |                |
|   | ļ                   | •••                   |           | · · ·                      | •••                   |                | •••             |                   |                 |                |
|   | H8                  | 3. 11. 20             | CHAR      | GE                         | INCOME                |                | 5,000           | _                 |                 |                |
|   | H8                  | H8. 11. 20 PRINT KORO |           | KORO                       | B EXPENDITURE         |                | 300             | 4                 |                 |                |
|   |                     |                       |           |                            |                       |                |                 |                   |                 |                |



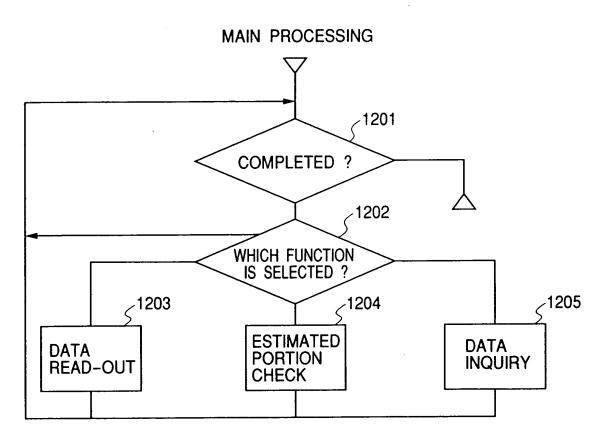


# TOTAL AT END OF MONTH

| INCOME |                  | <b>EXPENDITURE</b> |         |
|--------|------------------|--------------------|---------|
| BAZAAR | 300,000<br>1,500 | PRINT KOROB        | 300     |
| TOTAL  | 301,500          | TOTAL              | 301,500 |



FIG. 12





DATA READ-OUT
IC CARD CONTROL UNIT
PREPAID CARD CONTROL UNIT

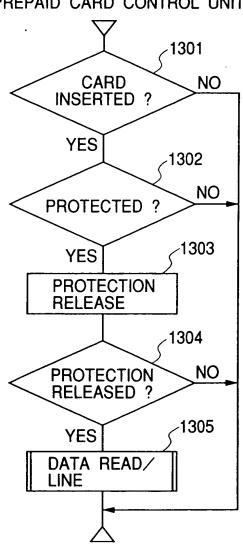
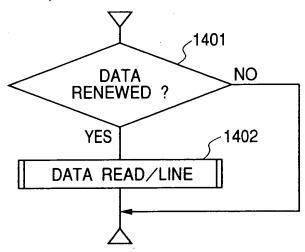


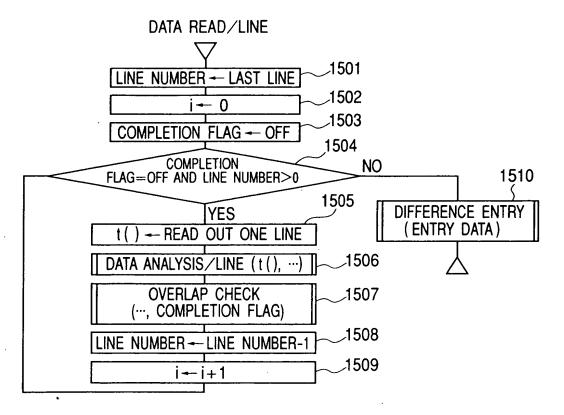


FIG. 14

DATA READ-OUT/ACCOUNT FILE, OTHER ASSET FILE







### FIG. 16

# DATA ANALYSIS / LINE ASSUMING ITEM (LINE NUMBER, YEAR, MONTH, DAY)=HY. M. D DATE (i) — Y YEAR M MONTH D DAY PRICE (i) — ITEM (LINE NUMBER, MONEY AMOUNT) ARTICLE (i) — ITEM (LINE NUMBER, NOTE) EXPENSE ITEM (i) — SPECIFY FROM ESTIMATION USE DATA FILE+RULE NUMBER AT REMARKS (i), ENTRY DATA INPUT MEANS DATE 1604



FIG. 17

DATA READ-OUT/ ELECTRONIC MONEY CONTROL UNIT

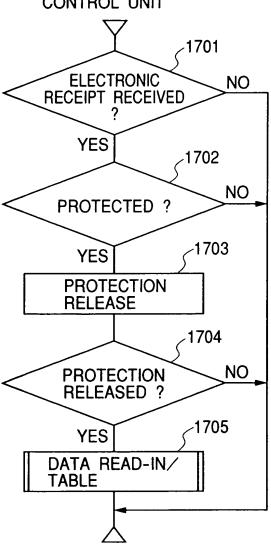




FIG. 18

DATA READ-IN/TABLE

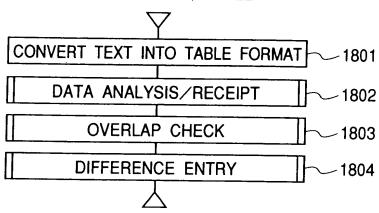
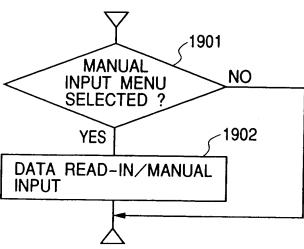


FIG. 19

DATA READ-OUT/ MANIPULATOR





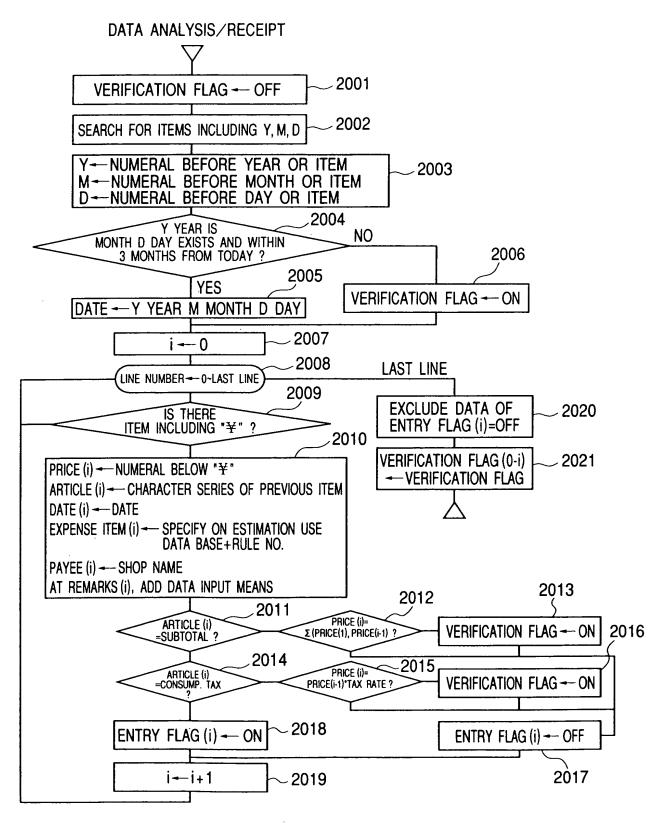
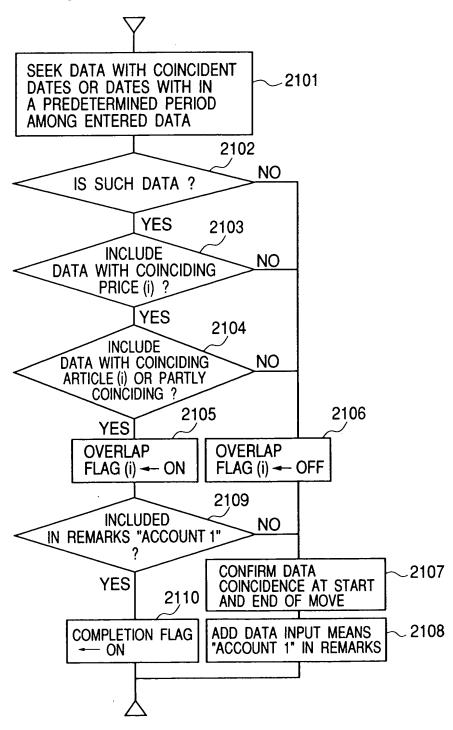




FIG. 21

OVERLAP CHECK





DIFFERENCE ENTRY

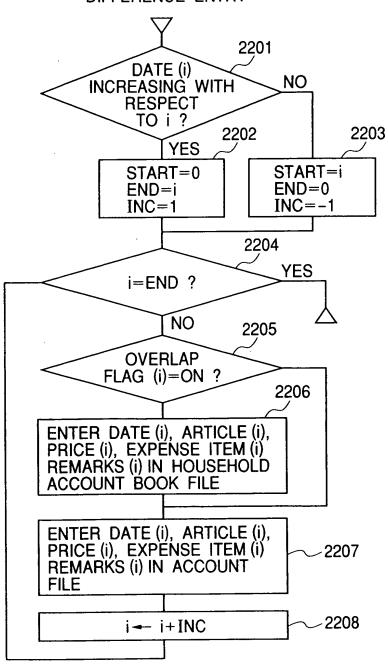
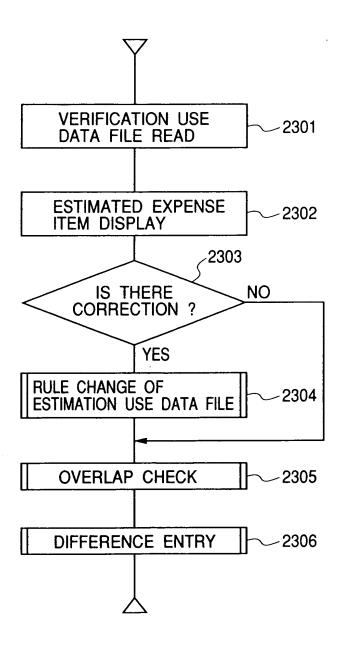


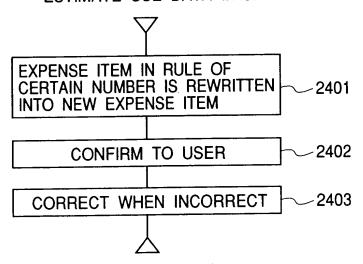


FIG. 23



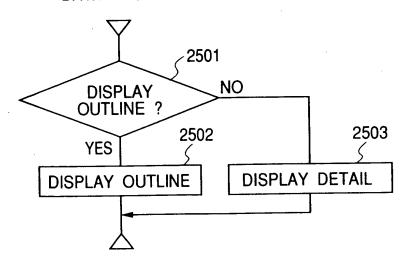


MODIFICATION OF ESTIMATE USE DATA BASE



### FIG. 25

DATA INQUIRY



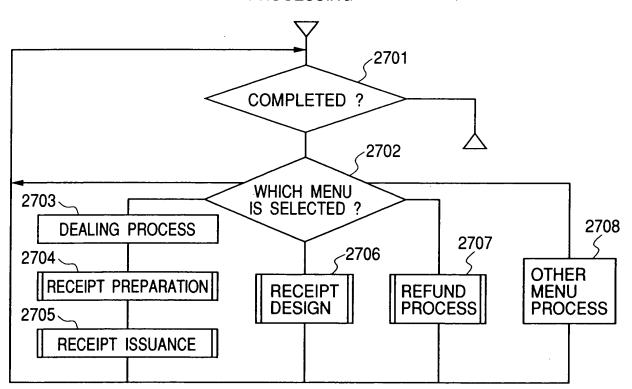


| ROW | 1                     | 2       |
|-----|-----------------------|---------|
| 1   | 1987 Y 8 M 29 D 13:20 |         |
| 2   |                       |         |
| 3   | [BILL]                |         |
| 4   | KEYMA CURRY           | ¥680-   |
| 5   | SEASON'S SALAD        | ¥480-   |
| 6   |                       |         |
| 7   | SUBTOTAL              | ¥1,160- |
| 8   | CONSUMPTION TAX       | ¥34-    |
| 9   |                       |         |
| 10  | TOTAL                 | ¥1,194- |
| 11  |                       |         |
| 12  | PAYMENT VIA IC CARD   |         |

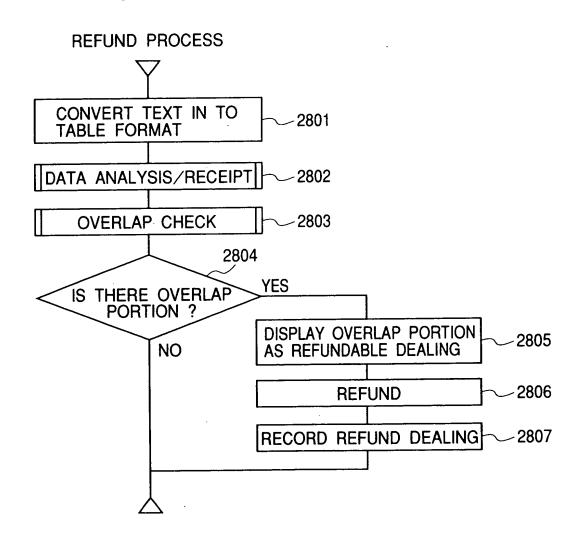


FIG. 27

## SHOP TERMINAL PROCESSING









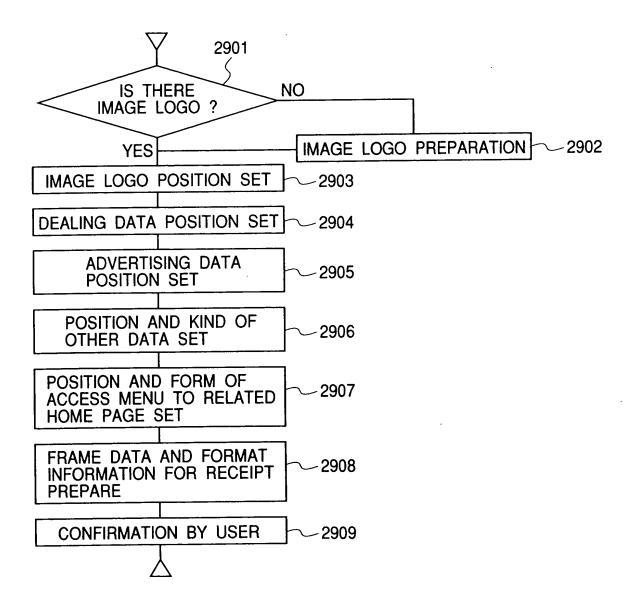




FIG. 30

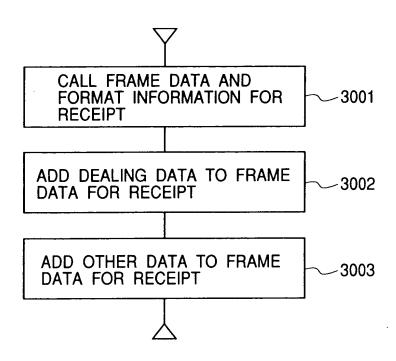
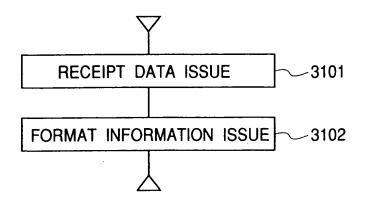
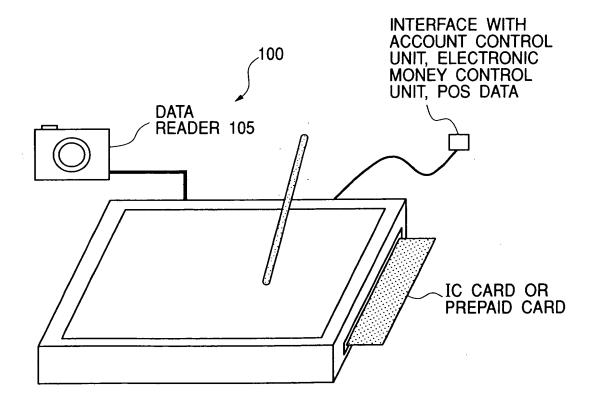


FIG. 31



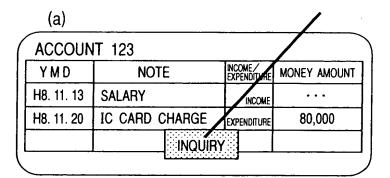






| INCO            | ME_            |                       |                    |                 |  |  |  |  |
|-----------------|----------------|-----------------------|--------------------|-----------------|--|--|--|--|
| DATE            | ITEM           | DEALING<br>DESTINATED | REMARKS            | MONEY<br>AMOUNT |  |  |  |  |
| •••             | •••            | • • • •               |                    | /               |  |  |  |  |
| 11/13           | SALARY         | • • • •               | ACCOUNT<br>123     |                 |  |  |  |  |
|                 |                |                       | INQUIRY            |                 |  |  |  |  |
|                 |                |                       |                    |                 |  |  |  |  |
| EXPENDITURE     |                |                       |                    |                 |  |  |  |  |
| EAT-OUT EXPENSE |                |                       |                    |                 |  |  |  |  |
| DATE            | ITEM           | SHOP                  | REMARKS            | MONEY<br>AMOUNT |  |  |  |  |
|                 | • • •          | • • •                 |                    | • • •           |  |  |  |  |
| 8/29            | KEYMA CURRY    | BARBEE                |                    | • • •           |  |  |  |  |
| 8/29            | SEASON'S SALAD | BARBEE                |                    |                 |  |  |  |  |
| CONS            | SUMP. TAX      |                       |                    |                 |  |  |  |  |
| DATE            | ITEM           | SHOP                  | REMARKS            | MONEY<br>AMOUNT |  |  |  |  |
|                 | •••            | •••                   |                    |                 |  |  |  |  |
| 8/29            | CONSUMP. TAX   | BARBEE                | EAT-OUT<br>EXPENSE |                 |  |  |  |  |
|                 |                |                       |                    |                 |  |  |  |  |





|    | (b)       |                     |                        | /               |
|----|-----------|---------------------|------------------------|-----------------|
| IC | CARD/     | MABC***1 DEALING RE | CORD                   |                 |
|    | YMD       | NOTE                | INCOME/<br>EXPENDITURE | MONEY<br>AMOUNT |
| H  | 8. 11. 20 | CHARGE              | INCOME                 | 80,000          |
| H  | 8. 8. 29  | RESTAURANT BARBEE   | EXPENDITURE            | 1,194           |
| _  |           | INQUIRY             |                        |                 |

(c)

# BARBEE

1987Y 8M 29D 13;20

[BILL]

KEYMA CURRY ¥680-SEASON'S SALAD ¥480-

SUBTOTAL ¥1,160-CONSUMP. TAX ¥34-

TOTAL ¥ 1,194-

PAYMENT VIA IC CARD

[NOTICE]

DURING SEPT. CURRY FAIR ON-GOING!

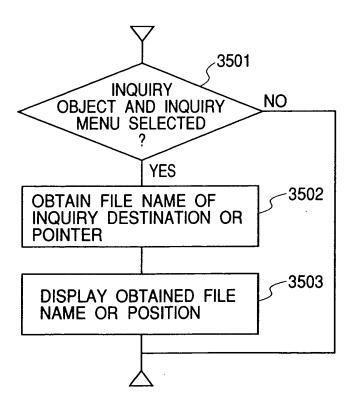
( MENU GUIDE

### (c') DISPLAY WHEN ORIGINAL RECEIPT IS ERASED

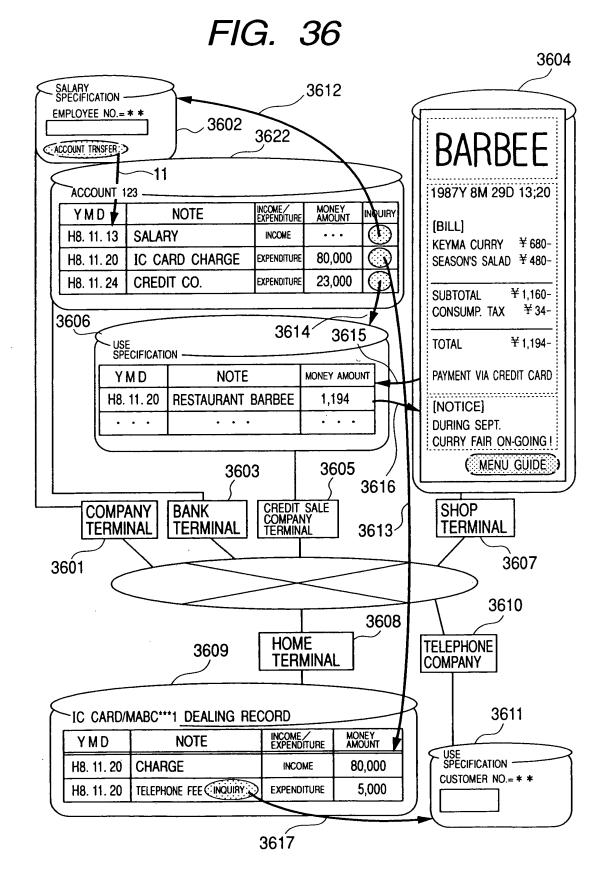
### ORIGINAL RECEIPT NOT FOUND OUT

| DATE | ITEM           | SHOP   | estimated<br>Expense item | MONEY<br>AMOUNT |
|------|----------------|--------|---------------------------|-----------------|
| 8/29 | KEYMA CURRY    | BARBEE | EAT-OUT<br>EXPENSE        | ¥ 680           |
| 8/29 | SEASON'S SALAD | BARBEE | EAT-OUT<br>EXPENSE        | ¥ 480           |
| 8/29 | CONSUMP. TAX   |        | EAT-OUT<br>EXPENSE        | ¥ 34            |
| 8/29 | TOTAL          |        |                           | ¥ 1,194         |

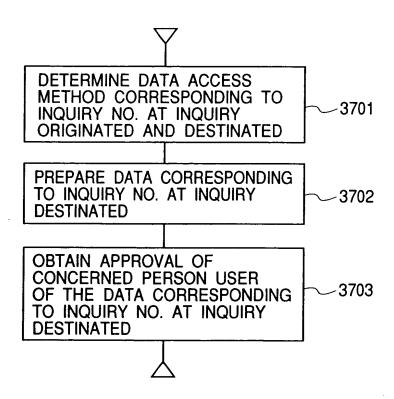














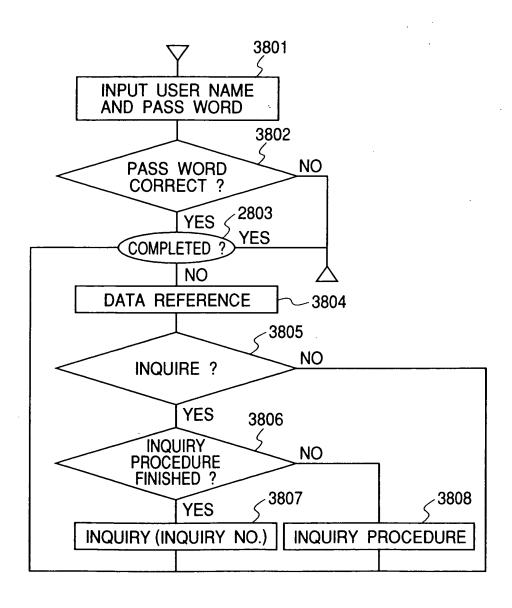




FIG. 39

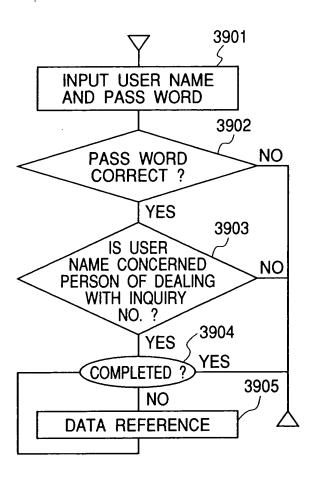


FIG. 40

|  | FLAG | DATA | NOTE | EXPENSE<br>ITEM | INCOME/<br>EXPENDITURE | MONEY<br>AMOUNT | INPUT MEANS | DATE OF INPUT | RELATED<br>INPUT MEANS | VERIFICATION<br>FLAG |
|--|------|------|------|-----------------|------------------------|-----------------|-------------|---------------|------------------------|----------------------|
|--|------|------|------|-----------------|------------------------|-----------------|-------------|---------------|------------------------|----------------------|

**REMARKS**